Summary of Public Comments on Cook Composites and Polymers Co. (CCP) Environment Cooperative Agreement and DNR Response

DNR received public comments between March 8 and April 9 2001 on the draft Environmental Cooperative Agreement between Cook Cooperatives and Polymers Co. (CCP). The 30-day formal comment period began when the notice was published in the Wisconsin State Journal on March 8. A similar notice was also published in the Ozaukee Press March 8. DNR also mailed the notice to over 150 individuals in the Saukville area February 23 and emailed the notice to additional individuals.

Comments were from:

- March 22, 2001, 3 PM informal informational meeting:
- March 22, 2001, 7 pm formal public meeting: Approximately 30 people attended the formal public information meeting. Twenty-one people who attended the evening meeting signed attendance cards. Four people 4 indicated they were against the action. Two indicated they were for the action. Thirteen indicated, "as interest may appear" or did not check a box. A transcript of the meeting is available at the DNR Web Site (http://www.dnr.state.wi.us/org/caer/cea/ecpp/agreements/cook/index.htm), the Saukville Public Library, and from the Project Coordinator, Lynn Persson.
- Written comments received during the public notice period: Four individuals or organizations submitted written letters to DNR with comments on the agreement. DNR also received 47 postcards from 55 individuals.

In this document, we grouped comments into 11 categories and summarized them. Comments that were directly quoted are in italics. DNR's response follows and, where appropriate, an explanation of the resulting change in the agreement. At the end of the write-up is a glossary of acronyms and some of the technical terms used in this document.

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1. CCP Community Advisory Committee (CAC) and Community Outreach

Summary of comments: At the public meeting people suggested that different types of people, especially neighbors, be added to the Community Advisory Committee (CAC) and that the CAC's meetings should be available to the public. DNR also received comments that the role of the committee should be broadened and on the type of topics the committee should address. One individual commented that more information should be available at the library repository.

DNR Response: CCP is among very few companies in Wisconsin (and the nation) to have a "Community Advisory Committee" on environmental issues and have made this type of formal commitment to public dialogue. CCP and the other companies that are participating in the Environmental Cooperation Pilot Program deserve a chance to form their CAC's, initiate their public involvement efforts, and let them evolve during the period of the Agreement. We expect it will be a learning experience for the company and for the community with opportunities for continuous improvement. CCP's dialogue with the CAC is already providing valuable input to the company on environmental problems of concern to its neighbors and the community as well as meaningful feedback on the approaches the company is considering to solve them. Members of the committee though, should not expect to make business or technical decisions for the company. We do anticipate however, that the decisions CCP makes are likely to be different than they would have been without input from the CAC.

Change in the Environmental Cooperative Agreement: CCP has added another neighbor and will pursue opportunities to add additional neighbors to the Community Advisory Committee. These changes will be reflected in Table B of the final Agreement. In addition, the advisory committee at its first meeting recommended that all meetings are open and advertised to the public and this is now happening. Time is reserved on the meeting agenda for public comment. The proposed Agreement and other mechanisms appear adequate to address the other comments DNR received.

2. Adequacy of Public Review and Input on the Agreement

Summary of comments:. One person had concerns about the adequacy of DNR public notice, public meeting, availability of information and DNR response to input. Several people requested that DNR hold the public meeting in the evening rather than afternoon. Another person requested that DNR hold a public meeting on the Agreement.

DNR Response: We believe that the public notice, meetings and comment period provided adequate opportunity for public comment on the agreement. DNR responded to local requests to hold an evening meeting in addition to a daytime meeting. The March 22, 2001 meeting was well attended. There was also additional opportunity for the public to submit written comments through April 9, 2001. Copies of the fact sheet and proposed Agreement were available after February 22 on the DNR Web site or from the DNR project coordinator. The public notice was mailed to people February 22nd, and appeared in both the state and local paper March 8th. The notice clearly told interested citizens how they could obtain a copy of this information.

DNR has made changes and clarifications in the Agreement based on comments we received during the public input period. These comments and changes are summarized elsewhere in this

document. CCP has also provided additional information about their project that appears in Attachment 4 of the revised agreement. DNR's Air, Waste and Wastewater Programs will also consider these comments during their normal regulatory review of CCP's projects. Other comments are best dealt with by CCP as they develop their Environmental Management System (EMS)and continue dialogue with their Community Advisory Committee.

3. Regulation And Environmental Protection

Summary of comments: DNR received a number of postcards from citizens expressing the concern that "… *As Saukville residents living close to the plant, we would be subject to a reduced level of environmental protection, if as proposed, the plants existing hazardous waste incinerator is less strictly regulated merely because its name is changed to that of a non-hazardous incinerator / "zero discharge wastewater evaporator." Significantly, by changing the incinerators name, CCP seeks to avoid meeting the 10/1/02 new MACT standards for heavy metals without removing heavy metals from the waste. …If the plant's incinerator is to continue operation, it should be as a periodically tested, hazardous waste incinerator."* One individual provided detailed comments on this issue.

Summary of DNR Response: The Environmental Cooperative Agreement does not replace or change the environmental regulations or the environmental permitting and approval process that CCP is required to go though for approval of its project(s). Technical staff in DNR's Waste, Air and Wastewater Pretreatment Programs are reviewing these project(s) using their normal regulatory review processes. CCP does benefit from the agreement by receiving a coordinated and expedited regulatory review of their project(s).

In 1999 CCP evaluated how it wanted to comply with a new air regulation called the Hazardous Waste Combustion (HWC) MACT that was scheduled to take effect October 1 2001 or 2002[aa]. One way of complying with this regulation is to not burn hazardous waste. Like many other facilities with hazardous waste incinerators, CCP chose this option. As part of the development of this Agreement, CCP made the commitment to stop burning hazardous waste by October 1, 2001. CCP will stop using its incinerator as a hazardous waste incinerator and "close" it using the RCRA hazardous waste closure requirements.

CCP is making two big changes. First, it is not going to fuel the incinerator with hazardous waste solvents. The solvents will be shipped offsite for reclamation and reused rather than burned. Second, CCP is making the reaction water non-hazardous by installing a Macro Porous Polymer – Extraction (MPPE) technology developed by Akzo Nobel Inc. This technology will remove the xylene and other solvents that make the wastewater an ignitable hazardous waste. CCP will also be neutralizing the reaction water using ammonium hydroxide so the reaction water is no longer acid, and thus a corrosive hazardous waste.

For the immediate future CCP will continue to operate its "Non-hazardous Wastewater Incinerator" to manage glycol and other pollutants remaining in its reaction waters. During this time, CCP has committed to continue to operate the incinerator at the same temperatures and other operating conditions used when it was a licensed hazardous waste incinerator. The "Non-

[a] This regulation has been under litigation. Dates and requirements of the HWC MACT may change as a result of this litigation.

hazardous Wastewater Incinerator" will be regulated by both the DNR's Air Program and Wastewater Pretreatment Program.

The changes CCP makes to the waste being incinerated change the name of the incinerator from a hazardous waste incinerator to a "Non-hazardous Wastewater Incinerator" or "Zero Discharge Wastewater Treatment System". The term "Zero Discharge Wastewater Treatment System" is used by DNR's Wastewater Pretreatment and Hazardous Waste Programs to refer to wastewater streams that are managed so that no water is discharge to a publicly owned wastewater treatment plant or to waters of the State. DNR's Pretreatment Program's approval of the CCP's "Zero Discharge Wastewater Treatment System" will require monitoring of each reaction water batch to ensure that the reaction water is not a characteristic hazardous waste. Section #5 of this document provides more information on pretreatment and wastewater issues.

DNR's Air Program has reviewed CCP's proposed project carefully and determined that that the changes that CCP has proposed will not cause an increase in air pollutants that would trigger the requirements for a new source air permit before construction. Although the modifications proposed for this process are exempt from requiring a construction permit, they are still subject to all applicable requirements in NR 400-499, Wisconsin Adm. Code and any other applicable federal, state or local regulations. Section 6 of this document provides more information on air regulations and issues.

CCP's proposed projects are not just a name change for a hazardous waste incinerator. Rather they indicate a significant change in CCP's approach to waste and pollution management. In the past CCP has put all of its wastes into a complex chemical mix that could only be managed by thermal destruction. As part of this Agreement and through the development of their Environmental Management System, CCP is identifying individual waste streams, their sources and evaluating whether there are ways of reducing, reclaiming, reusing (i.e. recycling) … these wastes and pollutants. The company is also considering raw material (i.e. natural resource) and energy conservation and better ways to treat and manage individual waste streams they cannot eliminate. CCP anticipates there will be both environmental and economic benefits from this new waste management approach

CCP, as part of this agreement, has committed to undertake some activities and monitoring that DNR probably does not have the authority to require under existing law. CCP will establish an Environmental Management System (EMS). CCP will also prepare feasibility studies of waste minimization and management options for its reaction water, glycol and waste solvents. When these studies are completed, CCP may propose an alternative approach to manage the remaining reaction water, glycol and waste solvents. Any change that CCP proposes will go through a full regulatory review of appropriate DNR Air, Wastewater and Waste Programs.

Changes in the Environmental Cooperative Agreement: CCP's prior verbal commitment to continue to operate the "Non-hazardous wastewater Incinerator" at the same temperature and operating conditions it operated the hazardous waste incinerator will be formally incorporated into the Agreement as part of "Interim Operational Requirements for CCP's "Non-hazardous wastewater incinerator".

Although the unit will no longer burn hazardous waste, CCP commits to continue to operate the "Non hazardous wastewater incinerator at the temperatures and operating conditions under which it operated the Hazardous Waste Incinerator (reference Attachment 3b) until either: 1) CCP ceases to operate the unit or 2) CCP's Title V or equivalent Air Operating Permit is formally issued with new operating requirements for the unit.

4. Odors

Summary of comments: A number of people at the public meeting indicated their concern about past, current and future odors in Saukville that may be attributable to CCP's Chemical plant. Most (but not all) people indicated that past odors from Freeman Chemical plant *"were a lot worse than they are now*." Current odor concerns are episodic events, especially on Church Street (burns your eyes and throat), on Main Street (that may be attributable to CCP or another company), diesel fumes on Railroad Street, and odors associates with a wastewater drain. Citizens also asked if CCP's proposed change in its hazardous waste management and what is burned in the incinerator could adversely affect odors. Other citizens were concerned that discharges to Saukville's wastewater treatment plant could increase odors in the community. One individual provided advice to CCP and DNR on how to find odors at the facility

DNR Response: CCP has indicated they want to and are willing to take the steps necessary to track down and work to eliminate any ongoing odor problems. The approach that is likely to be fastest and most successful is for CCP to work systematically and persistently with its Community Advisory Committee (CAC), affected neighbors and employees to determine the pattern and identify potential sources of the odor problems. CCP has indicated it will conduct include a systematic evaluation of potential sources at the facility including many of those mentioned during the public comment period. CCP then, as part of its ongoing Environmental Management System (EMS), can make changes in its operations and business practices to reduce and eliminate these odor problems. DNR recommends that citizens notify CCP at (262)284-0555 immediately when there are odor events. Citizens may want to also contact DNR Southeast Region Air Management Program at (414)229-0800 if there are ongoing air odor problems. DNR does have some limited authority to require odor controls, but if the company is willing to directly address the issue it's quicker and more efficient.

We do not believe that the change in CCP's hazardous waste management will adversely affect odors. The MPPE unit and all process units before the MPPE unit will be operated as a totally enclosed treatment unit (TETU). Leak detection and other routine inspections will continue as part of the operation of these units.

Change in the Environmental Cooperative Agreement: CCP and DNR will add the following language to the objective for Goal C.

- ***"Objectives for Goal C will be achieved through its Community Advisory Committee (reference Section VII) and Commitment to Environmental Management System (reference Section VIII).***

  Some specific environmental issues that CCP will address include Odors. In cooperation with it community advisory group and its employees CCP will development an ongoing odor monitoring and minimization strategy as part of its Environmental Management System.

5. Discharge to Saukville Wastewater Treatment Plant

Summary of comments: A number of people were concerned because they believed the proposed Environmental Cooperative Agreement allowed CCP to discharge its high strength (as measured by COD) reaction water to the Saukville wastewater treatment plant. One person was concerned that the discharge could cause odor problems at the plant. The individual also expressed concern about CCP hauling the wastewater offsite to another treatment plant. Another individual noted that if CCP discharged to the Saukville wastewater treatment plant in the future, CCP should pay its fair share.

DNR Response: The Agreement does not permit, nor does CCP propose, a discharge of high strength (as measured by COD) reaction water to the Saukville's existing wastewater treatment plant. As noted in the response to # 3, for the immediate future CCP will continue to operate its incinerator unit as a non-hazardous wastewater incinerator to manage the glycol and other non-hazardous wastewater. This unit will be regulated by both DNR's Air Program (reference #4) and Wastewater Pretreatment Program.

CCP and DNR agree that it is useful for the MPPE unit and non-hazardous wastewater incinerator to go though the Wastewater Program's pretreatment review for a "Zero Discharge Wastewater Treatment System." The term "Zero Discharge Wastewater Treatment System" is used by DNR's Pretreatment and Hazardous Waste Program's to refer to wastewater streams that are managed so that no water is discharged to a publicly owned wastewater treatment plant or to waters of the State. The advantage of this approach for the CCP facility is that reaction water treated by the MPPE unit will be evaluated to determine if it meets the Pretreatment Categorical Standards for Organic Chemicals. This evaluation will help CCP evaluate long-term options for glycol waste recovery, reuse and management. The Pretreatment Program also provides a way that DNR can easily require monitoring of each batch of reaction water after it leaves the MPPE unit and before it is burned in the non-hazardous wastewater incinerator.

Thus the Agreement includes a timeline for CCP to submit information a baseline monitoring report and pretreatment plans and specs for a "Zero Discharge Wastewater Treatment System" (Non-hazardous wastewater incinerator) to DNR's wastewater program. These submittals will be reviewed by DNR's Wastewater Pretreatment Program based on NR 211.15 and 281.41, Wis. Stats. and ch. NR 108, Wis. Adm. Code and formal guidance for these type of systems that was developed by DNR's wastewater and hazardous waste programs in 1993. As part of the approval of this pretreatment system, DNR can require ongoing monitoring of the effluent of the

MPPE unit and specifically require that the system is operated as a "Zero Discharge Wastewater Treatment System" with no discharge to the Saukville wastewater treatment plant.

If in the future, when Saukville constructs additional capacity at its treatment plant and CCP completes its evaluation of glycol recovery options, the Village and CCP may want to re-evaluate a potential discharge. Any future discharge to the POTW would require approval by the Village of Saukville and a new submittal by CCP to DNR's Wastewater Pretreatment Program and review and approval of that submittal by DNR. At that time, Saukville can and should consider whether odors from the reaction water remain a concern after treatment by the MPPE unit and what CCP would need to do to insure that odors are not a problem. Another factor the Village should consider in its decision is appropriate fees for any discharge from CCP.

Changes in the Environmental Cooperative Agreement: None of substance, since the comments appear to be based on a misunderstanding of the Agreement and what CCP proposed. DNR will have its editors review the Agreement for clarity.

6. Air Emissions and Air Permitting Issues Related to the MPPE Unit and Incinerator:

Summary of comments: Several people expressed concern that "…*the Incinerator would continue to operate and that CCP proposes to transfer the existing, rigorously monitored Hazardous Waste Incinerator operation to that of a loosely regulated, non-hazardous Incinerator / "zero discharge waste water evaporator."* There appeared to be concern that Wisconsin air pollution regulations would not apply to the unit and if air regulations do apply, they would not be sufficiently restrictive or require sufficient monitoring compared to hazardous waste regulations for Incinerators. Specific air emission concerns included:

- Levels and regulation of heavy metals emissions;
- Impact of caustic addition to the reaction water for neutralization on emissions and incinerator operation;
- Potential for Nitrogen Oxide (NO_x) emissions from the incinerator.
- Odors (see section #4 above)

There was also concern that the air operation permit for CCP's Saukville facility had yet to be issued.

DNR Response:

CCP's "Non-hazardous wastewater incinerator" will have to meet all applicable state and federal air rules and regulations to be able to operate. DNR has completed a careful analysis to determine if CCP's proposed project will need an air construction permit or if the project is exempt based on having maximum theoretical emissions below those identified in s. NR 406.04 (2) Wis. Adm. Code. DNR air reviewers determined that the emissions were below those required for an air construction permit based on the information submitted by CCP 2/15/2001 and 6/28/2001. Although the modifications proposed for this process are exempt from requiring an air construction permit, they are still subject to all applicable requirements in NR 400-499, Wisconsin Adm. Code and any other applicable federal, state or local regulations.

After the proposed changes are made, Cook Composites Co. will need to revise it's air operation permit application (currently pending review). CCP has voluntarily, as part of the Environmental Cooperative Agreement, agreed to continue the routine monitoring that it did when the incinerator burned hazardous waste until the plant's air operation permit is formally issued with new requirements. As part of the issuance of the operational permit DNR will consider the need for additional monitoring of the incinerator and other parts of CCP's operations. The air rules give the DNR the authority to require stack tests as often as needed. The Air Program is not limited to a once-every-10-year stack test.

Wisconsin's Air Program has some very restrictive emission limits for hazardous air pollutants. These emission limits are set forth in Chapter NR 445, Wis. Adm. Code. These numbers are based on specific health affects of specific pollutants and limit the concentration of a pollutant that is that is emitted to the air. Depending on the pollutant and its initial concentration, these requirements may be more or less restrictive than a 99.99% destruction technology based standard.

CCP prepared a mass balance of the current waste streams burned in its hazardous waste incinerator to estimate the amount and source of any heavy metal emissions from the incinerator. This mass balance is included in attachment 4 of the revised Agreement. The heavy metals levels that were found were associated with the waste solvents the plant burned as fuel, rather than the reaction water. When CCP stops burning hazardous waste solvents in the incinerator, CCP will remove the most likely source of any heavy metal emissions. DNR's Air Program reviewed the information CCP provided on heavy metals as part of its new source air permit review and agreed that CCP's proposed project will decrease any heavy metals emissions the plant has.

CCP decided to use ammonium hydroxide rather than sodium hydroxide to neutralize its reaction water. CCP and DNR's Air Program reviewed this change to determine the impact on Nitrogen oxide (NOx) emissions. The use of ammonium hydroxide will increase NOx emissions about 10 tons/year. This increase is less than the 25 tons/year that would trigger a new source review for an air construction permit for this project. For comparison, in 1998 CCP reported approximately 8.1 tons NOx emissions from the entire facility. NOx emissions from the incinerator and rest of the facility will be looked at and modeled when the facility's air operation permit is issued. Until that time CCP has agreed to operate the incinerator at the same temperatures and under the same operating conditions that it used when it was burning hazardous waste.

CCP is one of about 400 facilities in DNR's current air operating permits issuance backlog that is due to staffing issues. While CCP does not yet have a formally issued Air Operation Permit, CCP is required to meet all the air regulations that apply to the facility. The Agreement does include a provision for CCP to update its air operating permit application when CCP completes its initial project and for DNR and CCP to subsequently meet to set up a schedule to work on issuance of the Air Operation Permit. As with all Air Operation Permits, there will be an opportunity for public review and comment on the draft
Permit.

Change in the Environmental Cooperative Agreement: There are no specific changes in the Agreement because of these comments. DNR's Air Management Program considered some of the specific air quality concerns that were raised as it reviewed CCP's submittal as part of normal air construction permit applicability review. Other air related comments will be considered by DNR air staff when they draft CCP's air operation permit. The agreement already contains a provision for DNR and CCP to set up a schedule for issuing it's air operation permit once this initial project is completed.

7. CCP's Proposed Hazardous Waste Minimization Project: Clarification of Project Description & Waste Minimization Goals

Summary of Comments: A number of people expressed confusion at the public meeting about what the project was that CCP was undertaking and how the Environmental Cooperative Agreement affected the project. One person suggested that *"DNR and CCP were deliberately obfuscating the description of the project in a number of ways such as not clearly stating that the incinerator would continue to operate"*. The person also commented that no "*Waste Minimization" or pollution prevention would occur with the project,"* CCP only seeks to *"'reduce' the waste generated by eliminating the hazardous characteristic."* Two people suggested that there be specific timelines and requirements for glycol recovery in the agreement.

DNR Response: DNR agrees that the description of the Environmental Cooperative Agreement and related waste minimization project(s) may have been confusing to some in the community. DNR staff use terms such as "hazardous waste", "Zero discharge wastewater treatment system", "waste minimization", and others because these words have specific meanings within the regulatory framework of their programs. There are separate environmental laws for each environmental media: i.e. air, water and waste, each with associated regulations, requirements and definitions of technical and regulatory terms. Terminology can differ between programs and staff from one program, such as air, often find themselves explaining their terminology to DNR staff from other programs. DNR staff does their best to explain projects, agreements and complex technical and regulatory terms in a simple and straightforward way but don't always succeed to the degree that they or the public might wish.

One of the major areas of confusion appeared to be the difference between the timeframe of the Agreement and CCP's initial project in which it will stop burning hazardous waste in its incinerator. The Environmental Cooperative Agreement is a five-year agreement that defines a dynamic process for working toward specific environmental goals over the next five years. The performance goals outlined in the Agreement and at the public meeting are for the five-year period of the Agreement, not what will have been accomplished when the Agreement is signed or when CCP initially stops burning hazardous waste in its incinerator. Recovering the xylene and other solvents from its reaction water is the initial project among a number of projects CCP will be evaluating to reduce and reclaim its hazardous wastes and other waste streams over the next few years. As noted in DNR's response #3 (above), technical staff in DNR's waste, air and Wastewater Pretreatment Programs are reviewing the details of each project using their normal regulatory review processes.

Increasingly federal and state environmental laws promote "reduce, reuse, recycle", "pollution prevention", "waste minimization", and resource conservation as preferable approaches to simply "treating and disposing" of a waste or pollutant. CCP's waste minimization efforts focus on recovering the xylene, glycol and other chemicals that are found in the reaction water from the portion (approximately 92%) of the reaction water that is water (H2O). Thus, the amount of recovered chemicals will be much smaller than the total amount of reaction water that is now reported as a generated hazardous waste. While this amount may seem small, all 5 million pounds of the reaction water will no longer be ignitable because of the recovered chemicals.

CCP has provided a refined mass balance for its initial project that can be found in Attachment 4 of the revised Agreement. As part of this agreement, CCP also will be undertaking feasibility studies to look at solvent and glycol waste minimization and management options. Additional information on projected solvent and glycol reduction and recovery will be available when CCP completes these two related feasibility studies.

Change in the Environmental Cooperative Agreement: DNR will edit the Agreement to clarify that the goals of the Agreement related to hazardous wastes will be achieved through waste reduction and recycling and reducing toxicity of the waste and not necessarily eliminating generation of all the wastes. DNR editors will also review the document for consistency of terminology and clarity. The following change will be made in goal A of the agreement:

- ***Through waste minimization and pollution prevention eliminate or significantly reduce the amount and toxicity of the waste streams that are currently burned in its hazardous waste incinerator. Ensure that hazardous wastes and other constituents are reduced at their source whenever possible, or, when not possible, that they are recycled in an environmentally sound manner, preventing undesirable transfer of chemical releases from one media (air, water, land) to another.***

DNR agrees that the agreement should have a clearer process and timeline for action on the waste minimization feasibility studies for waste glycol and waste solvents. DNR and CCP will add the following additional steps in the schedule of agreed upon activities to insure that there is a process for acting on the feasibility studies for solvent and glycol recovery:

- ***Within 2 months of submittal of the Feasibility studies for waste minimization of waste glycol and waste solvents CCP present this information to the CAC and also meet with DNR to discuss implementation these projects (reference IX.A.3 b & c and XI.A.4)***

- ***Within 2 months of receipt CCP's Waste Minimization Plan for Glycol and Waste Solvents DNR will provide initial feedback and facilitate EPA feedback on the feasibility studies and identify what information, permits and approvals shall be needed for the project to proceed. Upon CCP's request DNR will work with CCP to develop a coordinated review process and, as appropriate, an agreed upon schedule for normal regulatory review of these waste minimization project by DNR's Air, Water and Waste Programs.***

8. Waste Solvent Management and Minimization by Incinerator and MPPE Unit.

Summary of comments: A couple of people commented that waste solvents provide good fuel for the incinerator and questioned "*Why replace with natural gas when gas prices are high?"* Another individual suggested that natural gas is a preferable fuel to solvents.

One individual commented that.."*the amount of Xylene recovered by the MPPE unit will be small and its quality questionable. "This is not significant waste minimization…Reusing the recovered xylene and other solvents would be risky and uneconomical… Hazardous waste incineration is a known technology and provides 99.99% destruction…MPPE technology is unproven and inadequately tested….MPPE monitoring is not included in the Agreement and is likely to be expensive and sophisticated.*"

DNR also received one suggestion that MPPE unit be operated as a totally enclosed treatment unit.

DNR Response: Most of the comments on solvent versus natural gas use as fuel appear to be directed at the increasing cost of natural gas rather than environmental concerns. Natural gas is generally a cleaner burning fuel with less potential for emissions of contaminants such as heavy metals.

The economic analysis and business decision on the MPPE unit and its ability to recover xylene is CCP's to make. DNR is evaluating the proposed Agreement and proposed projects to ensure they:

(a) Provide at least the same level of protection of public health and the environment as provided by the environmental regulatory methods under chs. 280 to 295.

(b) Encourage facility owners and operators to achieve superior environmental performance.

The MPPE technology is in use and demonstrated at other resin manufacturers similar to CCP. CCP has done feasibility studies to evaluate its application to their facilities. The DNR Pretreatment Program will be requiring monitoring of the unit as part of the approval of the "Zero Discharge Wastewater Treatment Facility (Non-hazardous wastewater incinerator)". We did not consider it necessary to include the specific MPPE monitoring requirements in the Agreement because they would be a requirement of the DNR pretreatment approval. CCP and DNR did plan to use the results of this monitoring as part of the Baseline and Periodic Performance Evaluations under this Agreement (reference Section XII of the Agreement). In response to public comment we are modifying the agreement (see below).

As part of the Environmental Cooperative Agreement CCP commits to complete a Solvent Waste Minimization Feasibility Study. In the short term, while this study is completed, CCP will ship the xylene recovered from the MPPE unit and its other waste solvents off-site to a commercial solvent reclamation service and then reuse the solvents reclaimed by that facility. When CCP completes the Solvent Recovery Feasibility Study we expect that CCP will consider the investment to reduce, recover, reuse and recycle on site most of the 1.7 million pounds/ year of hazardous waste solvents it currently burns in its hazardous waste incinerator. As long as CCP sends its waste solvent offsite for reclamation Wisconsin Hazardous waste laws require CCP to report the waste as a generated hazardous waste. If CCP chooses to reclaim the wastes on-site for reuse only solvent reclamation waste residual that can not be re-used would have to be reported as a hazardous waste.

DNR agrees that the Agreement should include a clearly defined timeline for CCP to discuss the results of the solvent waste minimization feasibility study with the CAC and DNR to determine the overall feasibility and desirability of implementation compared with other project that CCP may want to undertake to improve the environments as part of the implementation of its EMS.

Change in The Environmental Cooperative Agreement:

DNR and CCP will formally incorporate the following monitoring and management requirements into the agreement for the MPPE unit.

- ***Prior to treatment in its Non-hazardous wastewater incinerator CCP will test each batch of reaction water to ensure that the reaction water is not a characteristic hazardous waste for ignitability or corrosivity based on test procedures referenced in NR 605.08 Wis. Adm. Code. The monitoring data will be reported as part of CCP's pretreatment monitoring report or in other reporting system agreed upon between DNR and CCP.***

- ***CCP will operate the MPPE unit, neutralization unit and other tanks and piping prior to the MPPE unit as a totally enclosed treatment facility subject to the provisions of NR 630.04(5)***

Also Reference # 7.

9. Waste Glycol Management and Minimization

Summary of comments: One individual commented that glycol recycling is unlikely to be economical and that if CCP wants to recover glycol they should use distillation as a readily available and demonstrated technology. Two individuals indicated that CCP should be required to recover glycol as part of the Environmental Cooperative Agreement.

DNR Response: CCP has indicated it's long-term commitment to glycol recovery. As part of its commitments in the Environmental Cooperative Agreement CCP is conducting a waste minimization feasibility study to evaluate cost-effective, low energy and environmentally sound glycol recovery and recycling options. Some glycol recovery technologies require substantial energy use. CCP is considering distillation and investigating other technologies that may be more energy efficient. CCP should not be required to choose a technology that may or may not be the most environmentally sound way to manage its glycol wastewater stream. One of the measures of the over all success of the Agreement (reference section XII of the Agreement) is the "Results of the glycol wastewater waste minimization and energy conservation feasibility study and any resulting implementation projects." DNR agrees that the Agreement should include a clearly defined timeline for CCP to discuss the results of the feasibility study with the CAC and DNR to determine the overall feasibility and desirability of implementation compared with other project that CCP may want to undertake to improve the environments as part of the implementation of its EMS.

Changes in the Environmental Cooperative Agreement: Reference # 7.

10. Goals of the Environmental Cooperative Agreement Pilot Program

Comment Summary: One individual provided extensive comments on the proposed agreement and concluded "*For the above reasons and those presented in my hearing testimony, CCP's proposal does not meet the clearly defined ECPP requirements of improved communication to the community and superior environmental performance. Accepting CCP's proposal would in fact, as documented, reduce the incinerator's environmental performance and protection. Therefore the ECPP proposal must be denied*." The individual also commented that "… *The ECPP process did not meet the statutory and DNR / EPA MOA requirements. Independent of the technical issues, the DNR & EPA need to review "process items*" such as:

- *"Despite the "repository" 3-ring binder which CCP first took to the library on 3/15/01, there was no accurate, local public record where an individual could determine CCP's only proposal is to continue operation of the plant's incinerator"*
- *"CCP's pontification at the 7/31/00 meeting that CCP intends to comply with EPA's goal to shut down incinerators, again, without revealing CCP's only proposal is to continue operation of the plant's incinerator."*
- *"By the 10/1/01 "action date" of the ECPP it is evident a valid permit cannot be issued for discharge of CCP's reaction water, if treated, to Saukville's currently undersized POTW. [A recent caption in the Ozaukee Press indicates the current Saukville POTW expansion will not be complete until 2003.]"*
- *Given the structure of an ECPP, At the 3/31/00 and 3/22/01 meetings the public had the right to expect CCP to show up with technical experts and a technically comprehensive proposal. Instead the public received vague or inaccurate process descriptions and excuses.*

"…Conclusion: If any model is passed on to other companies, this ECPP failure should warn: Involve community before 2 years are spent constructing elaborate scenario. Be honest up front. Forget the fancy jargon. Factually explain and address problem. Don't promise waste minimization that isn't real. Don't base entire proposal on unrealistic POTW permit." "Talk is cheap…" "…As I indicated, had CCP presented an accurate process description to the public presented an enforceable commitment to significantly reduce the quantity of reaction water waste incinerated and presented even a simple economic comparison / raw material vs. energy balance of the existing incinerator vs. proposals my view of the ECPP process would likely be different…"

DNR Response: As indicated in DNR's responses #3 to #9 DNR believes that during the period of the agreement the normal regulatory review of CCP's projects by DNR's Air, Waste and Wastewater Programs will provide adequate environmental safeguards for any project that CCP considers.

In the Environment Cooperative Agreement, CCP makes long term commitments for enhanced environmental performance that go beyond what would otherwise be required in environmental regulations. CCP has committed to setting environmental goals for its facility including waste and pollutant reduction. CPP also commits to develop and implement an Environmental Management System to continuously improve its practices to minimize environmental impacts and conserve natural resources and to work cooperatively with its

neighbors, the local community and others in these efforts. CCP also commits to take leadership in product stewardship, integrating health, safety and environmental considerations into the design, development and improvement of products, including a commitment to conserve, where possible, natural resources and energy. As part of the agreement, CCP will report annually on the progress it has made toward achieving its goals.

Wisconsin Statutes (299.80) provides DNR with guidelines for administering the Environmental Cooperative Pilot Program and for the content of the individual environmental cooperative agreements. As part its responsibilities for administering the program the DNR has the responsibility of "(n) Seek to increase trust among government, facility owners and operators and the public through open communication…". Trust and open communication are not easily legislatively mandated. We believe that DNR and CCP have made a good-faith effort to provide information and opportunities for public comment during the development of the agreement. There was miscommunication and misunderstandings of the scope of the proposed agreement as the agreement was developed and the process can be improved upon. CCP's proposed agreement has a well designed Community Advisory Committee (CAC) and proposal for ongoing community dialogue and outreach. DNR believes that there is a greater opportunity for "increasing trust and improving communication" with CPP's commitment to establish a Community Advisory Committee than would exist without the agreement and that commitment.

11. Other Issues.

a. **Impact on garden and health:** One individual expressed concern about odors from a wastewater drain and how they may be affecting fruits and vegetables in her garden. DNR staff and CCP management have each indicated they will follow up with this individual to evaluate her concerns.

b. **Noise:** Several neighbors expressed concern about recent noise from the plant and asked whether it was associated with the new MPPE unit or whether the MPPE unit would add to noise from the plant. CCP replied that the recent noise was due to what they hope is a one-time event that required special cleaning of equipment. The MPPE unit was not involved and should not add to noise at the plant. Since DNR has no authority related to noise, the best way for neighbors to address any noise problems are either through CCP's Community Advisory Committee or through local authorities.

c. **Groundwater contamination:** One individual indicated they would not drink the water in Saukville. A local official responded that water contamination problems were a past problem that has been resolved and had multiple causes. The Agreement already contains commitments by CCP to continue their long-term cleanup at its facility.

d. **RCRA (Hazardous Waste) Closure ---** One individual made several comments related to the formal "Hazardous Waste Closure" process for CCP's hazardous waste incinerator and storage area and suggested that CCP and DNR were "Trying to camouflage 'closure'". Federal and state hazardous waste laws require a that CCP clean and inspect its hazardous waste storage areas and incinerator

when it closes its licensed hazardous waste incinerator and stops accepting hazardous wastes from offsite facilities. After that, like other large quantity hazardous waste generators, CCP may use some of the same tanks for short-term (less than 90 day) storage of hazardous wastes that are generated at the facility. The incinerator cannot be used to burn a hazardous waste once it is closed. CCP did adopt changes in tank piping based on one comment.

12. Terms and Acronyms

Agreement: see Environmental Cooperative Agreement

Air construction permit: An air pollution control construction permit is required prior to construction or modification of facilities that will emit air contaminants above specified amounts.

Air operation permit : An air operation permit describes how a business must meet federal and state air quality regulations. It is a legal document containing information on the air pollutant sources at a business and how those sources are to be monitored and controlled. Before issuance, DNR provides public notice and an opportunity for the public to review and comment on the permit.

CAC: see Community Advisory Committee.

CCP: Cook Composites and Polymers Co.

Closure: see Hazardous Waste Closure.

COD or Chemical Oxygen Demand: COD is one measure of the strength of wastewater based on the amount of oxygen the chemicals in the wastewater will use when broken down by the wastewater treatment process.

Community Advisory Committee (CAC): The CAC is the Interested Persons Group that CCP has set up as part of its Environmental Cooperative Agreement. The CAC gives CCP the opportunity to develop an ongoing dialogue with the community as the facility develops its Environmental Management System and implements the Agreement. The group includes neighbors, community leaders, CCP employees, DNR and UW Extension staff and others. Meeting of the CAC are open to the public. To receive notices of meetings of the group or CCP's Newsletter that describes activities of the CAC contact CCP's Saukville Plant Manager at 262/284-0555.

DNR: Wisconsin Department of Natural Resources

EMS: see Environmental Management System

Environmental Cooperative Agreement: means an agreement entered into under the Environmental Cooperative Pilot Program (see below).

Environmental Cooperative Pilot Program: The Legislature established this program in 1997 to evaluate innovative environmental regulatory methods. Companies participating in the program

look for ways to achieve superior environmental performance through the most cost-effective means possible. Whole-facility regulation and pollution prevention are key in these agreements. Institution of an environmental management system will allow a systematic review of a company's impact on the environment. As part of the agreement, flexibility in regulations will be afforded to companies who meet these criteria. The program provides DNR with the authority to enter into up to ten Environmental Cooperative Agreements over a five-year period with persons who own or operate facilities that are covered by licenses or permits under current Wisconsin law. The statutory basis for the program is found in section 299.80(6), Wis. Stats.

Environmental Management System (EMS): means an organized set of procedures in conformance with International Standards Organization 14001 or functionally equivalent to that standard to evaluate environmental performance and to achieve measurable or noticeable improvements in that environmental performance through planning and changes in operations.

Glycol: Glycol is an organic chemical that has a high chemical oxygen demand (COD) when discharged to wastewater. It is not highly ignitable. When glycol becomes a becomes a waste is usually not a hazardous waste unless mixed with other wastes that are hazardous. Glycol is found in antifreeze and airplane deicers. Glycol can be toxic if ingested. It also has a sweet smell and is regulated as an air pollutant.

Hazardous air pollutant: An air pollutant that is hazardous to human health as defined in NR 450 Wis. Adm. Code.

Hazardous Waste (HW): This is a regulatory term for a solid waste that is specifically listed by the Wisconsin Department of Natural Resources as hazardous, or displays any of the four hazardous waste characteristics: ignitability, corrosivity, reactivity, or toxicity (containing certain heavy metals or organic chemicals). For more information refer to the DNR Publication "What is Hazardous Waste" PUBL-WA-106 98 . The regulatory definition of hazardous waste is found in s. NR 605.04, Wis. Adm. Code.

Hazardous Waste Closure: A regulatory term that defines the process a licensed hazardous waste treatment, storage or disposal facility must go through when they no longer conduct these activities and to make the facility suitable for other uses.

Hazardous Waste Combustion (HWC) MACT: means a federal MACT air standard that applies to incinerators and cement kilns that burn hazardous waste. EPA issued the regulation for this standard in 1998. The regulation has been under litigation that may affect the final deadlines and standards for incinerators that burn hazardous waste.

Hazardous Waste Generator: This is a regulatory term used to describe a facility or other source whose actions or processes produce a hazardous waste. These facilities do not need a license or permit to generate hazardous waste or to store hazardous waste for limited time on their site. Hazardous waste generators are required to follow strict regulations to manage the waste they generate and to track the waste they generate "from cradle to grave".

Hazardous Waste License: Facilities that store hazardous waste for long periods of time, treat hazardous waste or dispose of hazardous waste on their site are required to have a hazardous

waste license issued by the Wisconsin DNR. Licensed hazardous waste facilities are sometimes called Treatment, Storage and Disposal Facilities or TSDs. Some types of hazardous waste treatment are exempt from this requirement to encourage reclamation and reuse of hazardous wastes.

HW: see Hazardous Waste

Interested person: a person who is or may be affected by the activities at a facility that is covered or proposed to be covered by an Environmental Cooperative Agreement or a representative of such a person.

MACT: MACT standards (Maximum Achievable Control Technology) are federal air pollution rules intended to protect the public from hazardous air pollutants.

MPPE: Macro Porous Polymer – Extraction (MPPE), a technology developed by Akzo Nobel Inc. that separates certain types of solvents and other chemicals from water. CCP will be using this technology to separate solvents from its reaction water.

Non-hazardous wastewater incinerator: DNR, CCP and the CAC agreed to use this term to describe CCP's incinerator when it no longer burns xylene and other hazardous wastes. CCP will continue to use the incinerator in the immediate future to manage CCP's remaining reaction water that contains glycol. DNR's Wastewater Pretreatment Program will regulate CCP's Non-hazardous wastewater incinerator as a "Zero Discharge Wastewater Treatment System"

Nitrogen oxides (NOx) -- Nitrogen gas comprises about 80% of the air and is relative inert (doesn't combine with other chemicals). At high temperatures and under certain other conditions it can combine with oxygen in the air, forming several different gaseous compounds collectively called oxides of nitrogen (NO_x). Nitric oxide (NO) and nitrogen dioxide (NO_2) are the two most important. NO_x are air pollutants produced from burning fuels, including gasoline and coal. NO_x react with volatile organic compounds to form smog. NO_x are also major components of acid rain.

Pollution Prevention: . means an action that does any of the following:

a. Prevents waste from being created.
b. Reduces the amount of waste that is created.
c. Changes the nature of waste being created in a way that reduces the hazards to public health or the environment posed by the waste.

Pollution Prevention does not include incineration, recycling or treatment of a waste, changes in the manner of disposal of a waste or any practice that changes the characteristics or volume of a waste if the practice is not part of the process that produces a product or provides a service.

POTW: Publicly Owned Treatment Works is a regulatory term used to describe a community's wastewater treatment system.

Pretreatment: A wastewater requirement for facilities that discharge large amounts of industrial wastewater must meet certain standards for discharge prior to sending their wastewater to a municipal wastewater treatment plant.

RCRA: the Resource Conservation and Recovery Act (RCRA) is the federal statute that regulates the generation, treatment, storage or disposal or recycling of solid and hazardous waste. Wisconsin has similar laws and administrative codes that cover many of the requirements of RCRA in the Wisconsin.

Hazardous Waste Closure: A regulatory term that defines the process a licensed hazardous waste treatment, storage or disposal facility must go through when they no longer conduct these activities and to make the facility suitable for other uses.

Reaction Water: CCP uses this term to describe the wastewater that is a byproduct of the chemical reactions CCP uses to make its products. The chemicals contained in the reaction water are variable, but they include water (approximately 92%), xylene and other solvents (approximately 1%), glycol (approximately 6%) and organic acids and other chemicals.

Reclamation: "Legitimate recovery or reclamation of a hazardous waste means the regeneration of a hazardous waste to remove contaminants so that they may be put to further use, the processing of a hazardous waste to recover usable materials or the regeneration of waste to its original form. This term does not include the burning or beneficial use or reuse of a hazardous waste."

Totally enclosed treatment unit (TETU): A regulatory term that means a unit for the treatment of hazardous waste which is directly connected to a production process and which is constructed and operated in a manner which is designed to prevent the discharge of any hazardous waste or constituent thereof into the environment during treatment.

Xylene: is any of a group of very similar organic compounds with the chemical formula C_8H_{10}, It is a colorless, sweet-smelling liquid that catches on fire easily. The greatest use of xylene is as a solvent. Xylene mixtures are used in gasoline and to make phthalate plasticizers, polyester fiber, film and fabricated items. People who breathe high levels may have dizziness, confusion, and a change in their sense of balance. Xylene may also cause irritation of the skin, eyes, nose and throat and have other effects.

Waste Minimization: Wisconsin hazardous waste regulations define waste minimization as "pollution prevention, beneficial use or reuse of a hazardous waste and legitimate recovery or reclamation of a hazardous waste." In general, the term refers to measures or techniques that reduce the amount of wastes generated during industrial production processes and other activities. The term is also applied to recycling and other efforts to reduce the amount and toxicity of waste going into the waste stream.

Waste Minimization Feasibility Study: Studies that CCP is conducting to evaluate options to reduce, reuse and recycle the glycol in its reaction water and the hazardous waste solvents CCP uses in its production process in an environmentally sound manner.

Zero Discharge Wastewater Treatment System: The term "Zero Discharge Wastewater Treatment System" is used by DNR's Pretreatment and Hazardous Waste Programs to refer to

wastewater streams that are managed so that no water is discharge to a publicly owned wastewater treatment plant or to waters of the State.